MUSEUM
PUBLIC LIBRARY

The Music

and

Musical Instruments

of

Southern India and The Deccan.

The impression of this work is limited to 700 copies and 50 artists' proofs.

No future impressions will be printed.

NOVELLO, EWER & CO.

REFERENCE

OF

Southern India and The Deccan

BY

C. R. DAY

CAPTAIN, OXFORDSHIRE LIGHT INFANTRY.

WITH AN INTRODUCTION BY

A. J. HIPKINS, F.S.A.

LONDON & NEW YORK: NOVELLO, EWER & CO.

and

MDCCCXCI

LONDON:
NOVELLO, EWER AND CO.,
PRINTERS.

DEDICATED BY PERMISSION

TO

LIEUTENANT-GENERAL HIS ROYAL HIGHNESS

The Duke of Connaught and Strathearn

K.G., K.T., K.P.

CONTENTS.

	PAGE
INTRODUCTION	ix
PREFACE	xv

CHAPTER I.

Indian music—How changed in the course of years—Its decline under Mahomedan rule—Hindu ideas of music—How encouraged in the South of India—Connection with religion—Influence of religion upon music—Legends—Difficulty of deciphering the ancient treatises—How differing from European music—Most noticeable peculiarities - 1—12

CHAPTER II.

Preservation of music in Southern India—Modern Karnâtik system believed to be closely akin to the ancient—Sanskrit treatises—Definition of s'ruti—System of twenty-two—Formation of scales (grâma)—Relation of major and minor modes—Deviation of intervals of system of twenty-two from those of just intonation—Comparison of ancient scale with European diatonic—Results of recent observation—System of twelve hinted at in Sanskrit—Murchanas—Râga—How differing from mode—Tâla or rhythm—Time, how estimated—Ancient varieties of rhythm—Ancient notation - 13—29

CHAPTER III.

Modern theory—How differing from ancient—Notation—Arrangement of gamut—Scales—Time, how signified—Application of measure to music - 30—37

CHAPTER IV.

Râga—How defined—Notes essential to composition of—Vâdi and Samvâdi notes—Modern meaning of Murchana—Examples of Murchana applied—Ancient and modern methods of performance of râga—How differing—Alâpa—Madhyamakâla—Gamakas—Classification of râgas—Popular scales for—Allied to certain passions—Peculiarities—How apportioned to seasons and hours—"Kattika," or list of modern râgas - 38—56

CHAPTER V.

Taste of European and Oriental nations: how differing—Reason for non-employment of harmony—Method of singing—Of Indian melodies—Form—Classification of—Rhythm—Employment of mixed times—Tonality often doubtful—Resemblance of Indian music to that of other countries—Examples of popular melodies—Hindustani musical system: how differing from Karnâtik—Examples of Hindustani melodies—Scales employed in the Hindustani system 57—91

CHAPTER VI.

Musical entertainments—Music and the Drama—Influence of the latter upon songs of the country—Of the Indian orchestra—Religious music—Temple music—Employment of bells—Street music—The Nahabet—Nautch music—Dancing - 92—98

CHAPTER VII.

Of instruments—Decoration—Materials—How susceptible of improvement—Chief defects in construction—Eastern origin of many European instruments—Descriptions of instruments in common use - 99—154

CHAPTER VIII.

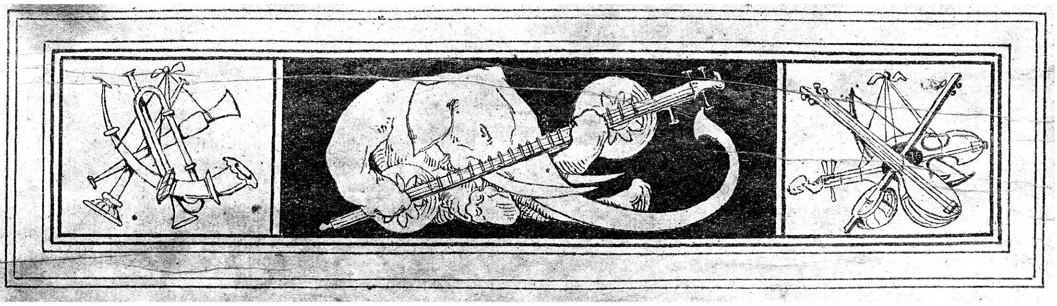
Principal seats of music in Southern India—Famous Indian musicians of the South—Bibliography of Indian music—Sanskrit MSS. upon music - 155—168

Appendix - 169—173

LIST OF ILLUSTRATIONS.

		PAGE
PLATE I.	A BÎN PLAYER	109
PLATE II.	SOUTHERN INDIAN VINA. SMALL SITAR	111
PLATE III.	SUR-S'RINGÂRA. LARGE SITAR	117
PLATE IV.	BÎN-SITAR. TAUS	123
PLATE V.	SÂRÍNDA. SÂRANGI	125
PLATE VI.	RABÔB. CHIKÂRA. SÂRANGI	127
PLATE VII.	TAMBURI. YEKTAR. PERSIAN SITÂRA	129
PLATE VIII.	SVARAMÁNDALA	133
PLATE IX.	KINNARI	135
PLATE X.	MRIDANG. TABLA AND BAHYA	137
PLATE XI.	NÂGARA. DHOL	139
PLATE XII.	KHANJERI. TAM TAM	141
PLATE XIII.	TÂLA. JÂLRA. BUDBÚDIKA	143
PLATE XIV.	PUNGI. KURTAR	145
PLATE XV.	PILLAGOVI. MUKAVINA. S'RUTI. NÂGASÂRA. ALGOA	147
PLATE XVI.	MOSHUQ. S'ANKHU	151
PLATE XVII.	TUTURI. NAFARI. S'RINGA. KURNA	153

8 - DEC 1937
MADRAS



MUSEUM PUBLIC LIBRARY

INTRODUCTION.

WHETHER music as an attribute of man is as old as speech or not, we cannot say; for present consideration it is sufficient that both can be intensified into poetic expression with a common power in affecting the emotions, notwithstanding that there is a vast and unbridgable distance between the precision of articulate language and the vague suggestion and glamour of musical sound. There is a quality in recited poetry not inaptly described as musical, since it has a special charm due to the choice and rhythm of words, assisted by the personal note of the reciter. But this rhythmic euphony is only allied to the musician's art, it cannot correctly be said to be comprehended in it, owing to the absence of defined musical intervals. From whatever point of view we overlook the human race, its history and development, we can nearly always trace music as having some connection, however slender, with the particular form of culture, or it may even be the absence of culture, under notice. Let us for the moment turn aside from the modern European musician's standpoint, as for him Harmony, although of comparatively recent origin, is indispensable, and we shall find melody in the succession of notes and their rhythmic movement possessing a beauty and exerting a charm which have endured for ages and comprehend the whole art of Music in the older civilisations. In Egypt; in Babylonia, Persia, and Arabia; in Asia Minor, Greece, and Rome—and in India, modern as well as ancient, for here simple melody still reigns supreme. With the exception of the Drone, apparently of Indian origin, which is literally

preserved in the Bagpipe and Hurdy Gurdy, and is a characteristic feature in our modern harmonic music—conspicuous as the Pedal point—the traces of any combination of musical intervals, out of Europe, are unimportant and need not be considered in a comparison of our Western music, with its elaborate system of harmony, and that of the rest of the world, whether ancient or modern, where harmony has no place.

Among the heterogeneous populations of India much material may be found that bears upon the history of melody. There is an Aryan strain probably as old as the Vedic Sanskrit, and a Persian which has in these latter days, and especially in Northern India, considerably modified the true Hindu. There are also echoes of an indigenous music which prevails among the hill tribes,* remaining in the Indian music of to-day; but yet not so clearly heard that we can say we identify here or there a refrain of an original or pre-historic music, although we may unconsciously be very near it. In the present state of our knowledge it is impossible to affirm that a pentatonic, or system of five notes in the octave, is of greater antiquity than a heptatonic or seven-note system; or that a chromatic or half-tone scale preceded an enharmonic composed of quarter-tones. All these varieties occur in our historic records, and if we argue from the analogies of speech, or consider the measurement of vibrating strings, it is no less plausible to decide for primitive narrow intervals than for primitive wide ones. In every province, go where we will, may be found some melodic or rhythmic habit or turn which it is possible to reckon as proper to it, having its peculiar scales or modes, its figures, rhythms, graces to mark its authenticity, but we may yet be far away from its origin, even as to locality. In the native music of Africa, so far as is known, there is much that may be traced to Asiatic sources.

The oldest civilisation that offers us any substantial information is Egypt. It begins in the earliest historic monuments with a graphic sign representing a fingerboard instrument of the tamboura or guitar kind, which already marks a summit level in instrumental construction and musical conception. We are not likely to learn from civilisations which may have preceded Egypt, as from the non-existence of any form of graphic art they cannot now divulge their secrets.

Another question that has arisen is that of the priority of instrumental or vocal music. There are many difficulties attending a vocal origin of what we understand in varied pitch and recurring rhythm by melody. The poets' music already touched upon, depending upon very small vocal inflections, can no more be measured and retained than the notes of many song birds which yet give us infinite pleasure. Very small musical intervals in traditional use which delight Indian and other Eastern people are clearly of instrumental origin, and to be attributed generally to facilities afforded by strings. This tradition may be of very great antiquity, and such old forms of music that occur to us, it may be Vedic chants or Hebrew psalms, are, in comparison, conceivably modern. A striking instance of a purely instrumental small interval is that of the Hindu musical unit, the s'ruti. The consideration of the value of this interval and of a combination of s'rutis to form an octave scale will be found in Captain Day's lucid exposition, and is as interesting as it is important. There can be no doubt about the origin of the s'ruti in the measurement of a stretched string.

The object of this introduction will be gained if we, for a little while, allow ourselves to forget the glory and splendour of our modern harmony, in favour of those melodic systems which once satisfied the great nations of classical antiquity, and still content those hoary civilisations of the East which preserve so much that is really ancient in their present daily life. Captain Day shows us interesting resemblances between the leading modes of old Greece and Asia Minor and certain favourite modes of the Hindus. There is no sure evidence of an intimate musical connection between those countries and India, a few scattered references in classical writers excepted; but the relationship of sister Aryan languages may have been paralleled by a relationship of musical types sufficient to justify a theory of descent instead of one of imitation.

The greater freedom in musical intervals melodic systems allow must be reckoned as compensating in some measure for the want of those harmonic combinations of which our European music has such inexhaustible wealth. What we lose in the possession of this rich estate is that we are effectually barred from the use and enjoyment of a more pliant melody, free from the fetters imposed by consonant chords, a melody which has a great privilege in easily touching the

emotions. Recent scale theories, claiming to have their foundation in natural laws, are insufficient to account for the material which allows the pliability of Eastern melody. But they are insufficient even to account for our common diatonic scale, the structure of which rests upon three harmonic triads, and with chromatic and enharmonic systems are utterly irreconcilable. Under Captain Day's guidance we find that in India an ancient quarter-tone system has become in modern times a half-tone one—substantially our equal temperament, but permitting an expressive or ornamental use of smaller intervals than the half-tone, according to the player's feeling or fancy. Whether this ideally half-tone system is due to a natural transformation tending to simplicity—as we find the rich Sanskrit reduced in modern vernacular dialects—or to an adaptation more suitable for practical use than a fine-spun theory of ancient music teachers, must, like nearly all the questions that have here been propounded, remain open or be regarded as beyond the possibility of answer.

It must not be overlooked that the Persian and Arab musicians have also their enharmonic systems, and if these may be referred back to an older Babylonian, the delight felt in such melodic freedom may have been widespread in a remote antiquity. We would not, however, resign our harmony for this freedom, although we admit its great power to incite a poetic impression when we are in certain moods. What Indian music offers to mood will be found in Captain Day's pages, and, studied from this point of view, the information he offers cannot but be of the highest value. He shows us the existence of a really intimate expressive melodic music, capable of the greatest refinement of treatment, and altogether outside the experience of the Western musician. What we learn from such inquiries is that the debated opinions of musical theorists, the cherished beliefs of those who devote themselves to the practice of the art, the deductions we evolve from historic studies—all have to be submitted to larger conceptions, based upon a recognition of humanity as evolved from the teachings of ethnology. We must forget what is merely European, national, or conventional, and submit the whole of the phenomena to a philosophical as well as a sympathetic consideration, such as, in this century, is conceded to language, but has not yet found its way to music.

A. J. HIPKINS.

PREFACE

OF late years so many works of importance, dealing with the subject of National music, have appeared that for the publication of this book the author feels that some apology is necessary.

The subject of Indian music, presenting, as it does, ideas so fresh and a musical system so distinct from what we in Europe are accustomed to, necessarily offers an ever-widening field for research and study. It is curious to note that while so many works upon the arts or industries of India have, in recent times, appeared, the subject of Indian music has been generally thought devoid of all science and unworthy, therefore, of any serious consideration.

Sir William Jones, at the end of the last century, endeavoured to dispel ideas of this nature, and his learned essay upon *The Musical Modes of the Hindus* has formed the basis of almost all Indian musical research. Some forty years later Captain Augustus Willard, who at that time commanded the troops in the service of H.H. the Nawab of Banda, published an interesting little *Treatise upon the Music of Hindustan*, a book which is now so scarce as to be almost unobtainable. Notwithstanding the real interest of both these works they are, unfortunately, of comparatively small practical use to the ordinary musical enquirer, unless, indeed, he is fortunate enough to possess a considerable previous knowledge of the subject.

The work which is now published has been the result of much study and research during a term of foreign service while the author's regiment was in India. And it is hoped that the information here offered for the first time may prove of interest, and may assist in some small degree in supplying a want hitherto felt among musicians and students of National musical literature. To render the book of greater value, and to assist those who may make further

research, a catalogue of various works dealing with the subject has been added, together with a carefully prepared list of various Sanskrit authorities. Notice has been taken of the legendary origin of music among the Aryans, and of its principles as understood in Modern India; the peculiar scales and rhythms employed have been described in detail; and examples of various airs are given in notation. In order to show the principles of form upon which the Indian musicians construct their melodies an analysis of some of the examples has been attempted.

The subject of Temperament, concerning which so many theories have been propounded, has been treated of. The thanks of the author are due to the late Dr. A. J. Ellis, F.R.S., for his great kindness in working out many special experiments concerning the temperament of the Indian scale, and for his permission to publish them here; also for his exhaustive account of the S'ruti vina, given in the Appendix.

The author takes this opportunity of acknowledging his thanks to his friend, Mr. A. J. Hipkins, F.S.A., both for his great help and sympathy, without which this work would never have been published; also for his learned Introduction. The author begs also to thank Mr. Cecil Bendall, of the British Museum, and Professor T. W. Rhys Davids, for much valuable help and information.

The Illustrations have been confided to the hands of Mr. William Gibb, and form seventeen plates, all of them admirable representations of Indian musical instruments. The author is indebted to the kindness of Miss Edith Hipkins for her very beautiful drawings, which are reproduced in Plates II., III., and IV.

Many thanks are due to H.H. the late Maharajah of Travancore and to H.H. the Maharajah of Mysore for their kindness in affording facilities for enquiry, and for allowing access to valuable manuscripts; and to the Râjah Sir Sourendro Mohun Tagore for permission to quote from his various works. Acknowledgment is also due to Messrs. Balwant Trimback Sahasrabadhe, and T. M. Venkatasesha S'astri, of the Poona Gayana Samaj; M. Narasimhayya, of the London Mission High School, Bangalore; Maula Bux of Baroda; and to many other native gentlemen too numerous, unfortunately, to mention by name.

ARMY AND NAVY CLUB,
April, 1891.

Musical Entertainments—Music and the Drama—Influence of the latter upon songs of the country—Of the Indian orchestra—Religious music—Temple music—Employment of bells—Street music—The Nahabet—Nautch music—Dancing.

MUSICAL entertainments among the higher classes are very popular and much in vogue. Upon such occasions a company of musicians are hired for the evening. The Vina is the favourite instrument, and is generally accompanied by either a Mathala or Tabla, or else by a kind of earthen pot called Gátha, much like the ordinary "chatty," which, in the hands of a skilful performer, is beaten with wonderful dexterity. Sometimes, but rarely, two vinas of different sizes are employed. In this case, if the players are skilful, the effect is very pleasing, especially in the performance of an Alâpa, a kind of rhapsody or fantasia impromptu, in any râga; each instrument keeps its part distinct, and the theme is cleverly imitated and tossed about from one to the other much as is done in a modern orchestra. Such imitation is, however, purely at the fancy of the performers, and not contrapuntal imitation as understood in Europe.

Throughout Southern India the native drama is exceedingly popular; the actors are generally well educated and of a high caste, and a good company always attracts full houses. Music is largely employed upon the stage, and there is a kind of orchestra attached to every native theatre. The songs sung at performances of the kind do not, as a rule, differ much from the ordinary music of the country, and of late years there has been a tendency to imitate foreign music, such as Arabian or Persian, and the English, Scotch, or other airs played by military bands at all large stations. These naturally find their way from the theatre into private houses—boys learn them and sing them in the street—and so their influence gradually extends and makes itself felt upon Indian music

in general. The old melody types, or râgas, are being less jealously adhered to, and the better educated classes of Hindus are beginning to see that music is not necessarily confined to one or two particular systems, but that, like nearly everything else, it is capable of improvement and further development.

A marked change for the better in the manner of singing is evident. This, indeed, could not fail to be the case when it is remembered that if a voice is intended to be heard by a large audience in a theatre or other building of the kind it must be thrown out to the full extent of its volume, instead of being contorted and its sweetness spoilt by the continued small inflections of tone and unnatural falsetto notes so much practised by native singers of the ordinary class.

The native orchestra is usually made up of the following instruments, or of a somewhat similar combination :—

Sârangi (*string*)	2	Mathala or Tabla (*drums*)	I
Tamburi (*string*)	I	S'ruti (*drone*)	I
Mukavina (*native oboe*)	I		

The use of the Sârangi in Southern India—except in conjunction with Nautches—is rapidly being discontinued, and an English fiddle tuned as a vina or sârangi is often substituted for it. Farther North the instrument appears likely to hold its place for a long time to come. A clarinet is sometimes preferred to the Mukavina.

In musical performances cymbals and bells of different kinds are used, according to taste, and the occasional use of a harmonicon of little bells or plates of metal (Septaghantika), or of porcelain cups or glasses (Jálatharángini), is much admired.

It is a common custom for the members of particular castes, sects, &c., to meet together at stated intervals for the purpose of worship, either in each other's houses or in temples. On these occasions music forms a prominent feature, and consists of hymns of different kinds, accompanied by a variety of instruments. Music of this nature is called Bhazana, and its use is almost universal.

Among the higher castes great trouble and expense is incurred in procuring good performers for this purpose. The songs are generally pretty and well sung to the accompaniment of the vina or sitar and tamburi, with, perhaps, a small drum to mark the rhythm. The Bhazana of the common people is a great contrast to this, and in their assemblies melody is often sacrificed to mere noise. Each man, in order to show his devotion, sings in turn, frequently with no regard for time or tune, whilst the others beat drums or blow a kind of whistle called Sillu, with other instruments, just as it pleases them, and, as can be imagined, the effect of this is discordant in the extreme.

The instruments commonly employed in Bhazana consist of one of the following combinations—

Tamburi	2	S'ruti	1
Sârangi or Fiddle	2	Sitar	1
Mathala	1	Tabla	1 pair
Tamburi	1	Sitar	1
Sârangi	1	Tâla (*cymbals*)	1
Mathala	1	Tabla	1 pair

Or, if the means of the worshippers be very limited, a single tambouri, with, perhaps, one pair of little cymbals and a common drum, or tabor such as Khanjeri, is found.

The music performed for Bhazana usually consists of kirthanas, gitas, and kruthis.

In temples, chiefly those of Lingayet or other Saivite sects, there is a peculiar kind of music in use called Kâradísaméla. It is so-called because a large conical kettle-drum called by that name is the principal instrument employed in it. The Kâradisaméla carries with it a special rhythm of its own; for lively airs— ; for those of a mournful nature—

A system of music called Sopânam is found in Malabar, where it is confined to temple services. In every temple of any importance in Malabar and Travancore it is usual to have both instrumental and vocal music at the steps leading to the principal shrine during the performance of certain services. The word sopânam, in its literal sense, means "steps," and hence gives its name to this particular kind of music. The Sopânam system varies in many respects from both the Karnâtik and Hindustani; a detailed description of it would, however, be unnecessary, since it is much akin to the Karnâtik system and differs only in technical points, which would be uninteresting to the reader.

The use of the gong and bell in temples is universal. Colonel Meadows Taylor, in speaking of this, remarks that the gong is not used as an accompaniment to any but the loud crashing and generally dissonant music of the temple ceremonies. No ceremony of sacrifice or oblation is ever performed without a preliminary tinkling of the bell, repeated at certain intervals according to the ritual.

There can be no doubt that the practice of using it is as ancient as Hinduism itself, and the ritual liturgies and works on ceremonial observances define the use to be made of it.[1] In fact, the use of bells for religious purposes

[1] "Proceedings, Royal Irish Academy." Vol. IX., Part i.

seems to have been from the earliest times so universal amongst almost all nations that it is only necessary to point out that the exact counterpart of the Hindu Ghante is to be found at the present day in the Sanctus bell in use in Christian Churches, and it is perhaps worthy of note that in the great sculptured Trimurti or Hindu trinity at Elephanta one of the figures holds a bell.

The Dasaris, a mendicant class of temple servers of Vaisnavite persuasion, usually employ a little side-drum, with one head only, called Dinni, not unlike the modern Egyptian "Tabl Shâmî"; other mendicants, called Andis, outcasts from Saivite sects, play upon a small gong called Semakkalam, which they beat with a stick. Both Dasaris and Andis often carry a horn as well, and support themselves by singing doleful ballads or hymns at street corners and by begging. Work of any sort they decline. The ordinary native band of discordant wind instruments, drums, and cymbals found throughout Southern India is called Méla. The players in these bands are mostly taken from a caste of Telegu-speaking barbers called "Mángala-vândlu," who make this their special profession and provide the music, so-called, commonly heard at temple ceremonies, weddings, festal gatherings, and all street "tamâshas." The composition of these bands varies greatly, the number of instruments in some cases being as many as thirty and in others perhaps only three or four; generally one or two nâgasâras—a s'ruti or drone—a drum such as the dhol—and a pair of cymbals (called Jhanj), about ten inches or a foot in diameter, are found. Sometimes a méla, consisting of a single mukavina, a flute, a flageolet, a drone, and a small side-drum called Dhanki is employed.[2]

The effect of a méla can hardly be called pleasing, unless to those whose chief delight is discordant noise. The air, such as it is, is generally drowned by the clanging of cymbals and the incessant drumming, which, added to the prolonged and shrill drone of the s'rutis, produce an effect considerably imposing. But, as Captain Willard pithily enough remarks,[3] it is heard to advantage "from a distance."

A peculiar institution of Indian music is known as the Nahabet,[4] and is so called from that being the name of the largest drum associated with it. There are certain persons—Hindu or Mahomedan noblemen—who are privileged to have attached to their service bands of professional musicians, who perform at certain stated hours of the day or night. This privilege is sometimes extended to certain temples and shrines of saints, or to spiritual princes—gurus or swâmies. To these

[2] Preference seems to be given to instruments of European manufacture, and it is not unusual to find old clarinets, flutes, and fifes used in these bands.

[3] "A Treatise on the Music of Hindustan." Captain N. A. Willard. Calcutta, 1834.

[4] This word is commonly pronounced "Nōbut."

bands the name of Nahabet is given, and they are usually placed in balconies over the gateways of cities or palaces, or in other elevated places elsewhere, and these places are known as the Nahabet Khaneh. The music played is, of course, traditional, but it possesses a distinct character of its own that is entirely different to any other music heard in India, and the effect, especially among mountains or in the hill fortresses, such as are found in Central India or Rajputana, is very striking. Usually care is taken to retain the services of the best performers for the Nahabet, and when heard from a little distance upon a still Indian night, and the sound is subdued, there is a good deal of wild beauty about it that possesses a charm peculiarly its own.

In the time of the Mogul Empire, we learn from the "Ain-i-Akbari,"[5] the Nahabet was held in great esteem, and the Emperor Akbar himself was even a performer. There were then in the palace Nakkera Khaneh some eighteen large Nahabets, twenty smaller kettledrums (Nakkeras), four Dohl, four Kurna or large trumpets, nine Surnais or pipes similar to the Nâgasâra, and their accompanying drones, two S'ring or horns, and three pairs of cymbals of large size, besides several Nafirs (a smaller kind of trumpet, similar to the Tuturi); and in those days the performances of the Nahabet occupied a prominent place in the daily palace routine. The general practice then was that the Nahabet played first at midnight and the second time at dawn. An hour before sunrise the musicians commenced to play the Surnais, an hour later there was a short prelude, which in turn was followed by pieces introducing the Kurna, Nafir, and other wind instruments, with the occasional use of the largest drum of all (Damama or Nahabet), but which did not introduce the Nakkera. After this the Surnais and Nafirs were played alone; an hour later there was a general *crescendo*, and then followed seven distinct performances, brought to a conclusion by the chanting of various prayers for blessings upon the Emperor, and then the day's service was finished by the Surnais players playing softly to a *pianissimo* of the drums.

In the present day the large number of different instruments formerly found in the Nahabet Khanehs of fortresses and palaces do not exist, and the effect of the modern Nahabet is therefore less imposing. There are, however, to be found in most Nahabet Khanehs one pair of large Nahabets, a couple of pairs of smaller kettledrums (Nakkera) and possibly other drums with a Kurna, one or two Tuturi, a pair or two of cymbals, one or two Nâgasâras and their accompanying drones, with perhaps a couple of Nuy or flutes-à-bec.

---

[5] "Ain-i-Akbari." Translated from the original version by H. Blochmann, M.A. See Vol. I., Ain. 19.

The Kurna is not always found, for only nobles of the highest rank are considered able to use it; and by Brahmins it is still held to be the most ancient and sacred instrument of music in existence, and they consequently give it a prominent place in their temple ritual.

Nautch music is termed Taffa or Kéylika and is performed exclusively by a caste of Nautch people called in Southern India Mélakâra-jâti. This is a composite class of dancing women and male musicians, distinguished by a marked social division from the higher orders of the musical profession. The dancing men and women of the Mélakâra caste, who together form a complete chorus, constitute what is called a Chinnaméla (or smaller music), in distinction to the Peryaméla (big music), which is a band of male musicians who play upon the Nâgasâra with drums and accompaniments differing from those of the dancers.[6] The Peryaméla, or Pathamélam as it is also called, is the ordinary native band formed by the Mángalavândlu caste and already described.

At Nautches the usual arrangement of instruments is as follows:-

Sârangis, or English fiddles tuned in the native manner	2
Mridang or Tabla (*drum*)	1
S'ruti-upanga (*drone*)	1
Tâla or jâlra (*cymbals*)	1

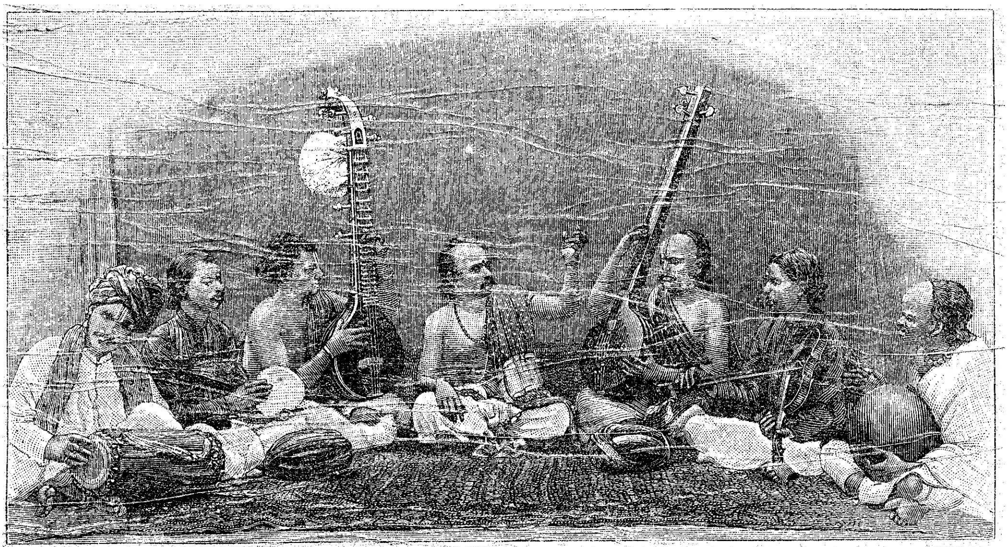
The Hindu art of dancing is treated of at great length in the Sanskrit work "Bhârata S'astra." Its origin is ascribed to the god Brahma. The science of dancing is usually considered under three heads—viz., nritta, natya, and nrittya. Of these nrittya is what is understood by dancing as seen at a Nautch; nritta comprises only rhythmical movements without gestures; natya has to do with stage action only. The masculine and feminine aspects of each of these three heads are fully treated of, and are styled *Tandava* and *Lasya*. There are rules for numerous motions of the head, eye, brow, and neck, to say nothing of those of the body, arms, and feet, that have to be carefully attended to. Each movement or look is described with an exactness that is almost incredible. All these various gestures and expressions are regulated by the tâla or rhythm of the dance, and are centred in the stamp of the feet upon the ground at intervals, or in the tinkling of the bells worn by the dancer. Indian dancing, like that of most Oriental nations, consists of gestures, slow, and more or less dignified, in time to the music, rather than actual dancing as understood by a ballet. To an Englishman a Nautch is therefore apt to be a rather disappointing entertainment, there being little real grace or symmetry of movement about the performance.

[6] "Manual of the Tanjore District." T. Venkasami Row. Madras, 1884.

And like Indian music, Indian dancing should be judged entirely from an Oriental standpoint. A Nautch usually commences with the singing of a Mangala or "song of hail" (generally in the Râga Nâta), the words of which are intended to do honour to the principal personages present. When this is concluded, the leader or conductor of the troupe, who invariably plays the tâla or jâlra, hums or sings a kind of accompaniment, called Konnagólu, to this one of the girls dances, keeping time with the soft tinkling of the bells tied round her ankles. During this the other instruments are independent of the leader and are played softly and without time in any râga that may be chosen, the chorus, if any, being much subdued. And when the dance is finished, songs—such as javadis or pathams—follow, one voice singing the solo and the whole of the voices taking up at intervals a soft refrain. Dances or gestures, in character with the words of the song, are made by the girls performing in front of the musicians.

Sometimes Sanskrit slokes, called "Astapathi," are sung by one voice, the instruments playing a kind of soft, dreamy accompaniment without any well defined time, either with or alternately with the voice.

The performance is brought to a close by the singing of a Mangala, in either the râgas Surati or Saurâshtra.



A Musical Party.

CHAPTER VII.

Of instruments—Decoration—Materials—How susceptible of improvement—Chief defects in construction—Eastern origin of many European instruments—Descriptions of instruments in common use.

MOST of the early Indian musical instruments remain still in use. Since the time of the Mahomedan invasion, about a thousand years ago, some Arabian and Persian instruments have been adopted, and have become almost naturalised; but their use has never become universal, and is mostly confined to the North of India or to Mussulman musicians.

The people of India have always been conservative in their tastes, and in nothing do we find this more evident than in their music and musical instruments. Descriptions of them all are found in many of the old Sanskrit treatises, and show that the forms of the instruments now in use have altered hardly at all during the last two thousand years; old paintings and sculptures, such as those of Ajanta, prove this even more conclusively.[1] There are many musical instruments to be found among the sculptures existing upon various old temples, cave temples, and ancient Buddhist topes and stupas in different parts of India. Those at Amravati and Sanchi are especially interesting.[2] For in the Amravati sculptures, which were visited by the traveller, Hiouen Thsang, and called by him Dhanakacheka, about the year 640 of our era, we find several representations of musical instruments. One of peculiar interest shows a group of eighteen women playing upon drums, a shell trumpet or s'ankha, one much like a surnai, and two instruments, apparently quanūns, of a shape very similar to

[1] *See* "The Industrial Arts of India." Sir C. M. Birdwood. London, 1880.

[2] "Tree and Serpent Worship." James Fergusson, F.R.S. London, 1868. *See* plates LXII., XXXVII., XXVIII. These sculptures are now in the British Museum.

the Assyrian harps. But there is another instrument represented that would seem to have been especially popular, but which is never met with in India now, nor can descriptions of it be found in the Sanskrit treatises upon instruments. This again figures in Assyrian and Egyptian sculptures and paintings. It is somewhat like a harp, and much like an African instrument called Sancho, and still used in some parts of that continent. Mr. James Fergusson notices strong Bactrian influences in this monument at Amravati, and is of opinion that the expression of the traveller Hiouen Thsang that this tope was ornamented with all the art of the palaces of Bactria is borne out to its fullest extent. This peculiar harp is again found amongst the sculptures at Sanchi; where also is seen an instrument resembling the Roman tibiæ pares. But the tibiæ pares are there shown without the capistrum or cheek bandage, and it is known that this instrument was also used by the Greeks. It is worthy of note that a form of the tibiæ pares is still common in Northern India, where it consists of a pair of flutes-à-bec. At Sanchi, too, is found a figure of a man blowing a kind of trumpet—the s'ringa—of much the same shape as that now employed in Bengal.

Perhaps the most reliable proofs of the antiquity of Indian instruments can be found, not so much in the Sanskrit, but in the Pâli works remaining. For to these Buddhist treatises it is an easier matter to assign dates that can be tolerably accurate. In the Milindha Panha,[3] a Pâli work, written a little after the Christian era, is a description of the vina, also of the shell-trumpet (s'ankha) and the flute (here rendered vañsa—a reed). And in the Mahaparambhana Sutta, a still older work of about 400 B.C., we find mention of the Bheri, a word still used for the Nâgara, or large kettle-drum, and also of the mridang (here rendered muttinga; *cf.* mathala, the Southern Indian name of the mridang). The same work contains mention of the viña and pañava, the latter being a drum. And these same instruments, with the addition of one called dendima, are found in a contemporary work called Sāmañña-phale-sutta, and in the Vimāna-vatthu also. The dendima is possibly the modern dinni, a small side-drum used by religious mendicants in Southern India at the present day.

The materials of which musical instruments are made are for the most part those that are found readiest at hand in the country—bamboo, or some similar cane, and large gourds are much employed. These gourds are used for many

[3] *See* Milindha Panha, Sacred books of the East, Vol. I., page 84. Vina is here translated *mandoline*; also page 48. *See* Buddhist Suttas. Oxford, 81. Translations of Mahaparambhana Sutta, page 101; also of Sāmañña-phale-sutta, § 90, and of Vimāna-vatthu, § 81, 10. Two kinds of tâla are mentioned in Digha I., 1, 13—*i.e.*, metal tâla and hand-tâla. The word for hand-tâla is found in many Pâli works. The thanks of the Author are due to Professor T. W. Rhys Davids for much valuable help and information.

purposes, and the best are trained in their growth to the shape for which they are required.

In the manufacture of certain instruments earthenware is employed; the common country "blackwood" is largely used; in fact, whatever is found by the instrument makers, that from its natural shape, or the ease with which it can be worked, can be adapted with the least possible trouble to themselves, is readily seized upon, whether its acoustical properties are suitable or not, purity of tone being sacrificed to appearance. The natural consequence of this is that many instruments are badly put together in the first place; faults in their construction are glossed over by outward ornamentation, and, from want of proper material, the tone, which should be the first consideration, is frequently sadly deficient in volume and quality.

The reason why this is so appears to be that the manufacture of musical instruments is chiefly in the hands of ordinary carpenters, most of whom are totally ignorant of the most elementary principles of music, and who, even if they possessed the requisite knowledge, could seldom afford either the time or money to spend upon experiments tending to improve their instruments; their principal consideration seems to be quantity instead of quality.

Most musicians therefore prefer to patch and mend their old instruments, even though it will be slightly detrimental to their tone, to procuring fresh ones of a quality of which they are doubtful, and which they cannot test practically before they make their choice.

A musical instrument, to be of any real practical good, requires in its construction not only skilled labour, but an experimental knowledge on the part of the maker of the principles of acoustics; he must know of the best materials, and the best known methods of building up an instrument from these materials. Such knowledge as this can only be attained by much study and the experience of a regular apprenticeship to the art. All this is, of course, obtained easily enough in Europe, where there is a ready sale for good instruments, and instrument making is a trade profitable enough for a supply to be kept on hand. In India, where, until comparatively recent times, music has been an art almost neglected for some hundreds of years, it is clear that there has been little scope for instrument makers of any ability, the supply being always far in excess of the demand.

The chief defect apparent in the construction of Indian instruments, besides what are mentioned above, is one which affects them all—viz., that without altering the tuning a change of keys is impossible. This may at first sight seem incongruous, for the vina is semitonic. But it must be remembered that the

third and fourth strings of that instrument, though they pass over the finger-board, are seldom stopped, and such devices as shifts are *absolutely* unknown. There is likewise no method of tuning to any fixed standard of pitch. Willard, in speaking of this, makes the following observations :—"A drum or tabor, the sound of which is necessarily monotonous, is an ever attendant and inseparable companion to Indian songs, whether any instrument be present or not. Its sound is taken as the keynote, and all other instruments that may be present and the voice are regulated by it. From this it appears that as long as the use of the drum or tabor is not laid aside there will be no necessity for change of keys, and the rhythmical nature of Indian music renders a liberal use of the drum more essential, in order to mark the time distinctly, than any other accompaniment."[1]

Many of our own instruments, such as are in use at the present day, have their prototypes still in existence in the East.

The ancient Pâli and Sanskrit treatises would appear to contain the earliest reliable description of any musical instruments, and from these it seems clear that those of most Asiatic nations were originally derived from the same source.

The Persians still use an instrument called quanūn, much like that of the same name found now in India—a kind of dulcimer, strung with gut or wire strings, and played upon by plectra fastened to the fingers of the performers. This is a development of the kattyayana-vina or shata-tantri (*i.e.*, hundred-stringed) vina, as it was formerly called. This Persian quanūn, the prototype of the mediæval psaltery, afterwards became the santir, which has strings of wire in place of gut, and is played with two sticks, and in the West it eventually took the form of the dulcimer. Hence the origin of the complicated pianoforte of the present day can thus be traced to the Aryans. And so with many others. The violin, the flute, the oboe, the guitar, all have an Eastern origin. One of the earliest stringed instruments was called "pinaka," and had one string twanged by the fingers; its invention is ascribed to the god Siva.

The violin bow is claimed by the Hindus to have been invented by Râbana, King of Ceylon, who, according to tradition, lived five thousand years ago.

The earliest instrument played with a bow was called râbanastra or râbanastrana. What this instrument was like is rather doubtful, but at the present time there exists in Ceylon a primitive instrument played with a bow, called "vinavah," which has two strings of different kinds: one made of a species of flax and the other of horsehair, which is the material also of the string of the

[1] "A Treatise on the Music of Hindustan." Captain N. A. Willard. Calcutta, 1834.

bow, which with bells attached to it is used as a fiddle-stick. The hollow part of this instrument is half a cocoa-nut shell polished, covered with the dried skin of a lizard, and perforated below.[5]

The vinavah is rarely met with except in the hands of strolling musicians, who support themselves by means of it. Whether this is the primitive râbanastra or not it is impossible to say, but it seems extremely probable that if not absolutely identical it bears at least a very strong resemblance to it. Another very ancient instrument which resembled the râbanastra was called amrita.

Numbers of instruments still in use in India have not altered in the smallest particular their ancient forms. The vina, the tamburi or tamburu-vina, and the kinneri still remain just as they are described in the ancient books, even down to the very details of the carving with which they are adorned, so conservative are the people who use them of all connected with the art they hold to be so sacred. The peculiar shape of instruments of the viol and violin tribe appears to have a prototype among Indian instruments; and this can be seen in the rabôb, which is made with distinct *upper, lower, and middle* bouts, and in a less degree in the sârangi, sarōde, and chikâra.

The rebec, once popular in Europe, was a form of the rabôb, brought to Spain by the Moors, who in turn had derived it from Persia and Arabia. Here again the Aryan origin is evident, the rabôb being, according to old Sanskrit works, a form of vina. And it is still popular in the North of India and Afghanistan.

The use of instruments of percussion of definite sonorousness, such as the harmonica, does not seem to have entered into Indian music at any time until quite of late years.

But this is rather an open question, for the harmonicon of cups called Jâlatharángini is by some ascribed to a very remote origin.

Wind instruments, although perhaps of earlier invention than those with strings, are nevertheless looked upon as of secondary importance. Possibly this may have some reason in the fact that Brahmins are not allowed by their religious laws to use them, excepting only the flute blown by the nostrils, and one or two others of the horn and trumpet kind. And so men of low castes are employed as players of wind instruments. But all unite in ascribing to wind instruments a very high antiquity. The conch shell, still used in the daily temple ritual in almost every place in India, is said to have been first used by the god Krishna, and it is mentioned in the great epic of the Ramayana, where it is called

[5] "An Account of the Interior of Ceylon and its Inhabitants." J. Davy, F.R.S.

Devadata. We also find it under the name of Goshringa, both in the Ramayana and the Mahabhârata.

The horn (s'ringa) is also said to be of Divine origin, and it is mentioned in the earliest writings. But the flute (murali) is still held to be peculiarly sacred, for this flute was the companion of the god Krishna in all his wanderings, and in Indian mythology this flute is looked upon with much the same veneration that the lyre was by the Greeks, and by Brahmins it is still used occasionally and blown by the nostrils. In all sculptures and pictures the god Krishna is represented as standing cross-legged playing the flute.

Reed instruments, although doubtless of a very remote origin, appear to have been invented at a later period than instruments of the flute species, and their use is, as has been stated, confined to either low caste Hindus or Mahomedans. For the Indian reed instruments are mostly harsh and wild, far too powerful and shrill to be used in concert with the delicate vina or sweet tamburi, and so their use is chiefly confined to out-of-door performances, where their sound is better heard and where they become fit adjuncts to the Nakkera Khaneh or band already described.

Instruments with double reeds appear to have been originally brought from India, and the double reed is found in the primitive oboes used there as well as in Persia, Arabia, and Egypt. There seems to be no trace of the *single beating* reed ever having been known in India, but the single *free* reed is found in the bagpipe of the country. Indeed, the bagpipe would itself seem to have an Eastern origin, and although its use in Southern India and the Deccan is chiefly confined to a drone-bass, yet in the Punjâb and Afghanistan pipes are sometimes found containing both drone and chanter. And I have heard them played with a dexterity that would do credit to a Highland piper.

The pungi, now used almost entirely by snake charmers, is said to have once been blown by the nostrils and called " Nâsajantra."

The jew's-harp (murchang) is mentioned in most of the Sanskrit works upon musical instruments, and its use is common all over India.

The use of the gong and bell are universal, and need no particular description. The gong—called sometimes Tâla, but more generally Ghari—is found in almost all Hindu temples, and is used both in the daily ritual and also to note the hours of the day. It is usually about a foot in diameter and ⅛-inch in thickness; it is made of bell metal, and sounded by a wooden mallet. Indeed, the tone more nearly resembles that of a bell, and has certainly nothing in common with the Chinese gong. In Southern India a light instrument of this kind called Jâgatay or Semakalam is found, which is sounded by a curved bone striker. The small

bell—called Ghante—is used in every Hindu temple, and is familiar to everyone. Bells of any size are not known in India, but the antiquity of the bell in India has been proved beyond doubt; specimens of curious old bells have been discovered in cromlechs and cairns in different parts of India.[6] And among the Todas, the aborigines of the Niliri Hills, the bell is still an object of especial veneration.[7]

The little ankle bells used by Nautch dancers are called Gūnguru or Gajelu, and are tied in strings round the ankles. They produce "a faint clashing sound as the feet move in steps, which mingles not unmusically with the dance music or songs which accompany the dance; and they not only serve to mark the time, but to keep the dancer or singer in perfect accord with the musicians. These bells are the symbols of their profession with all dancers and singers, and to some extent are held sacred. No dancer ties them on his or her ankles before performance without touching his or her forehead and eyes with them, and saying a short prayer or invocation to a patron saint or divinity—Hindu or Mahomedan. Nor is it possible, after a female singer or dancer has once been invested with them—a ceremony which is very solemnly performed and attended with much cost—to abandon the professional life so adopted. He, or she, *has tied on the bells*, is even a proverb to signify that the person alluded to has devoted himself or herself to a purpose from which it is impossible to recede. Strings of these small bells are also used for horses and tied round the fetlocks of prancing chargers, with gay tinsel ribbons or pieces of cloth; also round the necks of lap dogs; and some of a large size round the necks of favourite plough or cart bullocks. The latter are identical with sleigh bells. No post runner in India travels without a string of them tied on the end of his pole on which is slung the leather bag he carries, and on a still night their clashing sound, besides being heard at a great distance, serves to scare away wild beasts and to cheer the runner on his lonely path."[8]

And here it may be well to mention two instruments sometimes met with in Southern India—viz., the cup-harmonica and the Gatha.

The Jâlatharângini[9] is a harmonicon of cups of porcelain or earthenware tuned to the particular scale required by means of pouring in more or less water. It is played with two thin sticks, covered with felt or tipped with cork; and in company with other instruments the contrast of tone that its use effects is not unpleasing. The Septasvarab, called also Septaghantika, or Indian Glockenspiel,

[6] "Bells of the Church." H. T. Ellacombe. Exeter, 1872.

[7] "A Phrenologist amongst the Todas." Colonel Marshall. London, 1873.

[8] "Proceedings of the Royal Irish Academy." Vol. IX., Part i.

[9] This instrument is *said* to be mentioned in a Sanskrit work—the name of which the author has been unable to ascertain—believed to have been written about A.D. 700.

is somewhat similar, but more musical; it is made either of metal plates or bells, struck with a small felt-covered hammer. The employment of both instruments is rare.

The Gatha resembles a large spherical jar or "chatty" in shape, and is largely used by Telegu musicians as an accompaniment to the vina. It is about 18 inches in height, and has a very small aperture and short neck, which is held downwards when it is in use. It is beaten with the hands and wrists, much like the drum called mathala, of which it takes the place, and the players manage to produce sounds of different pitch by striking it in different places. The performer usually sits cross-legged, and holds the gatha between his thighs, striking it with his finger tips, flat of his hand, or fleshy part of his wrist.

Players upon the gatha display great dexterity, and often vary their performance by throwing the instrument up into the air and catching it again, beating it as they do so: this they keep up for almost any length of time. At the conclusion of the piece they let it fall into their hands (or upon the ground, so as to break with noise) at the exact conclusion of the measure (tâla), which they never for a moment lose.

In some performances it is not unusual for the player upon the vina to change the measure suddenly, as often as he wills, so that the gatha player may better show his dexterity.

Instruments of the trumpet kind—in which tones are produced by the lips vibrating within a cup-shaped mouthpiece—appear to be of very great antiquity, for mention is made of them in both the great Hindu epics—the Mahambhârata and the Ramâyána. There are large curved horns which in tone much resemble the Alp-horns of Switzerland. There are both straight and bent trumpets. The method of making an instrument of this kind more portable by being turned back, but without shortening its length of tubing, would seem to be very ancient. It is difficult to describe any definite scale for these instruments, for they are, with one or two exceptions, rarely used by any but men of low caste, and their proper compass is not employed or understood. The great similarity between the shape of the modern trumpet and the Indian tuturi is very striking, especially when it is remembered that this shape has not been copied from the European instrument, but has existed in India from remote ages.

Indeed, so many points of resemblance might be noticed, and the development through ages of so many instruments traced, that it would be inadvisable to enlarge this chapter by so wide a digression from the subject.

Indian musical instruments are usually classified under the following four designations, just as they were by Bhârata two thousand years ago:—

I. Tata-yantra—Comprising all stringed instruments.
II. Shusira-yantra—Comprising all instruments of percussion (not being covered with skin or parchment, such as drums), and includes cymbals, gongs, bells, castanets, &c.
III. Ghana-yantra—Comprising all instruments covered with skins, such as drums, tabors, &c.
IV. Anuddha-yantra—Comprising wind instruments of all kinds.

In different parts of India there is of course a preference for particular instruments, but it is impossible to assign definite districts to them, as all kinds are to be found more or less throughout the country.

In the following pages an endeavour has been made to give as far as possible some mention of all these instruments, together with the names by which they are known in different parts, and descriptions of those in most common use.

If details are given sometimes which at first sight are apparently unnecessary, it has been done because in similar cases of musical investigations, if many things which appeared to be of little moment at the time had not been left unnoticed, much interesting light would have been thrown upon several questions of great interest which are still involved in darkness.

In the tunings for stringed instruments given later, the position of the strings is as if the instrument were held upright, body nearest the ground, with the finger-board facing the reader. It is to be noted that in instruments of the vina kind the order of the strings is reversed from that of sitars and the like, where the first string or *chanterelle* is always on the right.

A Player on the Karnâtik Sitar.

CONNEMARA PUBLIC LIBRARY
8 - DEC 1937
MADRAS

PLATE I.

A BÎN PLAYER.

THIS plate shows the position of a player upon the Bîn or Vina[10] of the North of India. The vina of the South, described in the next plate, is sometimes called the Rudra vina, in distinction to the bîn or Mahati vina. As will be seen, this is a fretted instrument, the frets being arranged at semitonic intervals. The tuning differs from that of the Southern vina, and two gourd resonators take the place of the wooden pear-shaped body. It is worthy of note that an instrument of this description was described by Mersenne in 1636.[11]

The average total length of the instrument is 3 feet 7 inches, in which case the dimensions are as follows :—

The first gourd is fixed at 10 inches from the top, and the second about 2 feet 11½ inches.

The gourds are usually very large, about 14 inches in diameter, and each has a round piece cut out of the bottom to act as a sound hole.

The finger-board is 21⅝ inches in length and about 3 inches wide, and upon it are placed the frets, exactly in the same manner as in the vina, and at the same semitonic intervals.

The frets are nineteen to twenty-two in number, that nearest the nut usually being ⅛-inch above the finger-board, and that at the other extremity about ⅞-inch, the decrease gradual.

---

[10] This instrument is very fully described as "The Indian Lyre." "Asiatic Researches." Vol. I.
The bîn has been described by Mr. Carl Engel as "the vina of the Indus"; this is, however, an error on his part, it being but a form, and far from the best form, of that instrument, popular chiefly because of its comparatively low cost. Drawings of this instrument will be found in his "Musical Instruments," in "Asiatic Researches" above-mentioned, and in Hipkins and Gibb's "Musical Instruments."

[11] "Harmonie Universelle." Fr. Mersenne. Paris, 1636.

The strings are seven in number, four of which pass over the frets, the remainder being side strings, placed two on the left side and one upon the right.

The instrument is tuned as follows :—

but a very much more common tuning is—

the wire X upon the right side being tuned to either Ga (E) or Dha (A), according to the requirement of the râga performed.

The strings upon the left side and the two highest upon the finger-board are usually steel, the remainder brass or silver.

The instrument is held over the left shoulder, the upper gourd resting upon it, and the lower gourd on the right knee.

The frets are stopped with the left hand, the little finger of which is used occasionally to strike the side string on the left side.

The strikes are made by the right hand in a similar way to that employed in the sitar, except that the *two first* fingers are armed with wire plectra.

The notes are rapidly reiterated in the bîn as well as in the sitar by the plectra being passed backwards and forwards across the string ; this produces a kind of *sostenuto.*

The chief peculiarity of this instrument, as will be remarked, is the tuning, which employs additional intervals to that of the Southern vina, and so renders the instrument less confined in its modulation. The tone is rather thinner than and not so pleasing as that of the vina of the South, on account of the greater tendency of the strings to jangle. The instrument is nevertheless very popular, and when found in Southern India is used chiefly by Hindustani musicians. Instruments of this kind are sometimes made with moveable frets, like those of a sitar, in consequence of the greater facility with which they can be played by less experienced performers.

An illustration of a bîn of this latter kind is shown in Plate IV.

PLATE II.

SOUTHERN INDIAN VINA. SMALL SITAR.

THE instrument to the left of the plate represents the Vina in common use in Southern India. Though in Northern India and the Deccan the use of the vina, or bîn, is restricted to professional musicians or skilful performers, do not find this to be the case in the South. This instrument is taught in the iools in many places, and is a very favourite one with amateurs of the higher sses. The specimen here represented is about 250 years old, and is from the ection at the Tanjore palace. The delicacy of the carving and the great alth of decoration bestowed upon this instrument are remarkable, and prove o have belonged to some very distinguished personage—probably to one of Maharajahs of Tanjore.

he vina is a stringed instrument, with frets, played with the fingers, or finger-nails, somewhat in the same manner as a mandoline or guitar.

s construction, however, renders it for purposes of melody a far more perfect ment than either of the latter, and although its tones are not so full and ts compass is larger, and it is, in skilled hands, capable of producing a ı greater variety of effects.

Its tone, judged from a European standard, is rather thin, but curiously t and plaintive. It is somewhat like that of the Tyrolese zither, which, wever, it exceeds in fulness, and it is capable of infinitely more expression.

The vina has seven strings, four pass over the frets (twenty-four in number), ree shorter strings are placed at the side of the finger-board, and are employed iefly as a kind of accompaniment or to mark the time used by the performer.

The four large strings are termed saranis and are named thus :—

Sarani	1st, thinnest	....	steel.
Panchami	2nd,	....	,,
Mandaram	3rd,	....	brass or silver.
Anumandaram	4th, thickest	....	,, ,,

The three side strings are termed pakha-saranis and are of steel.

The names of the various parts of the instrument are as follows :—

(*a.*) Kayî or body, formed of thin wood and hollowed out of the solid.

(*b.*) Gvantu, a projecting ledge, often of ivory, separating the body from the stem.

(*c.*) Langaru,[12] metal fastenings which secure the strings to the attachment. These fastenings have rings sliding upon them which can be used in tuning to alter the pitch slightly, without turning the tuning pegs.

(*d.*) Dhandi, neck, made hollow.

(*e.*) Yeddapalaka, or belly. Small sound holes, in circles of about 2 inches diameter, are placed on each side of the strings, about 1 inch above the bridge.

(*f.*) Dhandipalaka, a piece of thin wood covering the hollow of the neck underneath the frets.

(*g.*) Mâruvapalaka, two ledges, each about ½-inch in height, projecting from the dhandipalaka and to which the frets are secured.

(*h.*) Metlu, or frets, formed of "half-round" bars of brass or silver about ⅙-inch thick.

(*i.*) Cupé, a cup or socket of some metal into which the burra or calabash is fastened; these cupés are often of silver and richly chased.

(*j.*) Burra, or calabash, a kind of hollow gourd attached to the underside of the neck, near the head, to increase the volume of sound.

(*k.*) Pallumanu, or nut, a piece of ivory over which the strings pass, placed between the pegs and the finger-board.

(*l.*) Mogulu, small ivory pegs answering the purpose of nuts, over which the side strings pass.

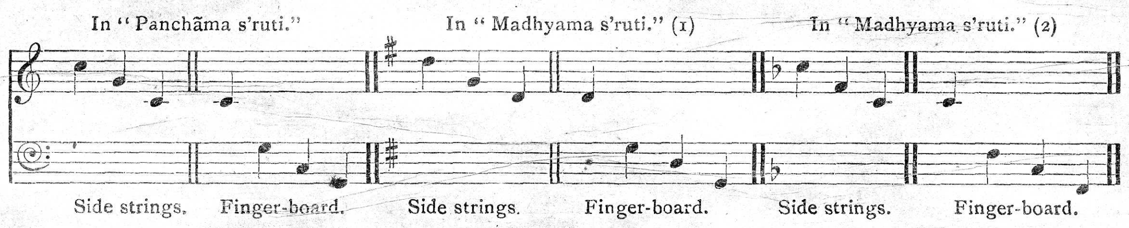
(*m.*) Gurram, bridge.

(*p.*) Bhirtu, tuning pegs.

[12] Strings are sometimes secured to the attachment directly, as described for those of the tamburi.

The burra or calabash is secured to the neck by means of a nut and screw, and is detachable at will.

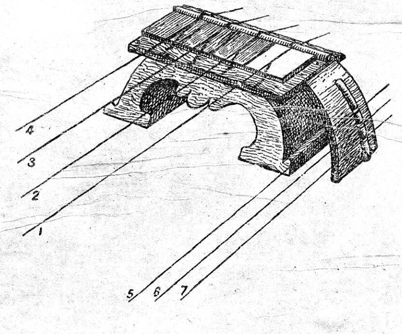
The instrument is tuned in one of the three ways following:—[13]



The construction of the bridge is peculiar and deserves notice.

A wooden arc supports a slab of wood 1 by 2½ inches. A resinous cement is poured upon this, and a piece of metal passing underneath the second, third, and fourth strings is laid above and manipulated until the strings produce a clear tone free from all buzz or twang; a wet cloth is then applied, or a little cold water poured over the upper surface, so as to harden the cement. Under the first string a similar piece of metal, in this case of a superior quality—either polished steel or bell metal—is fixed in the same way.

This process is considered very important, as the least carelessness affects the tone of the instrument and gives it a most unpleasant twang.



No. 1 is the thin string.	No. 5, ,, 6, ,, 7 — The same gauge as No. 1.
,, 2, very slightly thicker.	
,, 3, thicker again.	
,, 4, thicker again.	

[13] A native musician would say for Panchãma s'ruti, "Pa, Sa, Pa, Sa"; and for Madhyama s'ruti, "Sa, Pa, Sa, Pa"; hence the change of keys is shown.

The side string bridge is secured to the main bridge and the belly of the instrument and is made entirely of metal; it consists of an arc of brass with a projecting rim upon the side nearest the attachment.

The strings pass across the flat of the arc through three saw cuts in the rim. Pieces of silk or quill termed "jivalam," placed beneath the strings and the bridge, are occasionally employed to correct any inclination to buzzing.

Most instruments of this description require steel strings of a quality specially made for the purpose. The best strings are made at Channapatna in Mysore, or Bareilly in the North, where the process of manufacture is kept secret and is in the hands of a particular caste.

The price given for such strings is high, on an average Rs. 6 for a *sîr* of twenty-four rupees weight, when sold wholesale.

The fretting of a vina requires great care, and most musicians prefer to fix their own frets.

The frets are fixed to the mâruvapalaka by means of small spikes, and additionally secured by a resinous cement poured in between them, and moulded neatly as it hardens.

When finished the finger-board resembles a ladder, there being a space varying from ½-inch at the head to 2 inches at the end nearest the bridge between the frets and the dhandipallakâ, or piece of wood covering the hollow stem.

The vina is held in one of the three following positions:—

(*a.*) The performer sits cross-legged upon the ground, and holds the vina so that the calabash almost touches the left thigh, the left arm passing round the stem so that the fingers rest easily upon the frets. The body of the instrument is upon the ground, partially supported by the right thigh.

(*b.*) The calabash almost touches the left thigh as before, but the right knee is bent upwards, the body of the instrument being in front and resting upon the ground, touching the right leg, which prevents it slipping away.

(*c.*) The performer sits cross-legged upon the ground as before, but holds the body of the instrument in his lap, the finger-board being vertical.

The method of playing upon the vina is rather different from that of other Indian instruments. The left hand is employed to stop the strings on the frets, the right hand to strike with.

Strikes are called "mehtu," and are of three kinds, viz.:—

Kutra—mehtu.

Toda—mehtu.

Gotu—mehtu.

The right hand is employed thus: the wrist is laid almost upon the edge of the belly, and the hand is slightly arched upwards; the first and second fingers are above, and are used to strike the large strings, all strikes being made with the *nail downwards.* Players upon the vina purposely allow the nails of the right hand to grow rather long, for this instrument is never played with plectra. The side strings are sounded by the third and fourth fingers of the right hand moved *upwards.*

The first exercise that a pupil learns is to strike one of the large strings (downwards) simultaneously with one of the side strings (upwards), a more difficult feat to accomplish than might be at first supposed.

These simple strikes are called gotu mehtu. The kutra mehtu is accomplished by striking the same string twice—first with the forefinger and then with the second finger—so as to produce a repetition of the same sound.

The toda mehtu, or etouffe, is made by striking a string with the forefinger and then gently stopping the vibration with the second finger so as to produce a staccato sound.

The left hand is used for all work upon the frets.

As was the case with the lute, the melody is chiefly played upon the first string—the chanterelle, in fact—which is commonly stopped by the first and second fingers placed together.

The fourth string is stopped by the thumb—the others, when required, by the middle and third fingers.

The least difference of pressure upon the frets causes a variation in the pitch, of which use is made in all grace and embellishments.

A species of transient shake styled "rekhu" is of frequent occurrence; it is produced by the string when stopped being slightly pressed, and at the same time pulled out of the straight line. This will raise the pitch to any degree required, not exceeding a major third, beyond which it is found that the string usually breaks.

The performer can thus produce graces of all kinds, embracing intervals less than semitones, which can be clearly distinguished by the ear.

Another effect called "rava" is produced by the string being stopped upon one fret and being beaten by a finger upon the next fret above.

This, when combined with rekhu, adds considerably to the capability of the instrument, and it must be remembered that the string can be kept in a state of vibration very much longer than in the guitar, owing to its thinness in proportion to its length.

The use of glisse, as with the guitar, is frequent.

The small sitar shown on the right of the plate is of Deccan manufacture. It is ornamented prettily with ivory carving, and the body of the instrument is formed from a cocoa-nut. Sitars of this kind are much used by native ladies, and their tone is singularly sweet and plaintive, though, of course, not so powerful as that of the larger sitars. The method of arranging the frets and of playing the instrument is precisely as that described for the larger sitar in Plate III.

Anna Gharpure (a Sitar player in the service of H.H. the Thakore Sahib of Wadhwan).

PLATE III.

THE instrument shown upon the right of the plate is the Sitar.[14] This specimen has been adorned with paintings, representing the avatars or appearances of the god Vishnu, and is the work of a Poona maker. The sitars commonly found are only different from this in that the bodies are unpainted.

The sitar is called also Sundari, and is perhaps the commonest of all the stringed instruments of India, being much admired. Its use in Southern India is not so frequent as in the Deccan and farther North, and is chiefly confined to those who practise the Hindustani in preference to the Karnâtik system of music.

In general appearance the sitar is not unlike the tamburi, described later.

The finger-board is about three inches wide, the frets are of brass or silver, eighteen (sometimes sixteen) in number, and flatly elliptical; they are secured to the finger-board by pieces of gut passing underneath—this arrangement admits of their being shifted so as to produce intervals of any particular scale (thât), hence the capability of the instrument is naturally limited.

---

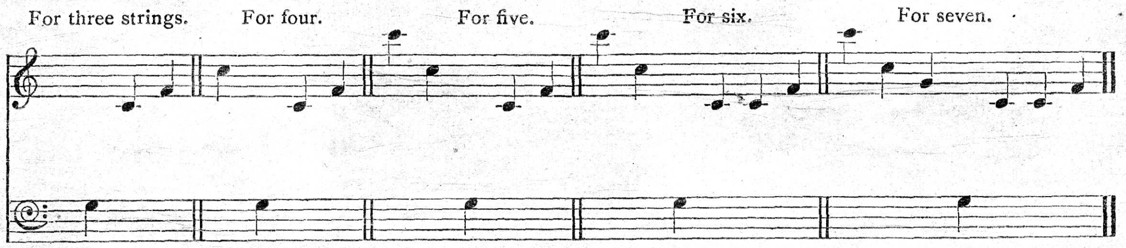
[14] The invention of the sitar is commonly credited to Ameer Khusru, of Delhi, in the twelfth century. Captain Willard states that the instrument derives its name from *si*, سه, signifying in Persian three, and *tar* تار, a string, as that number was commonly used.

The body of the sitar is usually of gourd, cut in half in the direction of the core, with a belly of thin wood pierced with a certain number of sound holes fixed upon it.

The tone of medium-sized sitars is considered preferable to that of large ones.

The nut, or ledge, over which the strings pass on their way to the pegs from the frets is peculiar, and is made double; that nearest the pegs having holes through which the strings pass, and that nearest the frets having simply small notches. The number of strings varies, instruments being made with from three to seven strings.

They are tuned as follows—



These tunings are considered to be "Panchãma s'ruti." If the G strings be lowered a tone the sitar will be in "Madhyama s'ruti."

The instrument is played by means of a plectrum of wire placed upon the forefinger, the thumb being usually pressed firmly upon the edge of the belly, so that the position of the right hand shall change as little as possible.

Sitars, called Taraffedar, with sympathetic strings underneath those played upon, are sometimes found.

The sitar is fairly easy to learn, and much can be made of it by experienced performers; but there is a peculiarity in its tone when played at all loud which greatly mars the effect, the tender charm and colouring of that of the vina being completely absent. To be heard with advantage a sitar should be at a little distance from the listener, the unpleasant jangle of its strings will not then be so apparent, and the melody will be more clear.

According to the common custom, the methods of shifting the frets are five. The five methods, called thâts, are as follows. These thâts have no names, but are usually known from the râgas that are commonly played upon them :—

1	2	3	4	5	6
		F♯			
		G			
		A♭			
		A			
		B♭			
		B			
		C			
		D♭			
		D			
		E♭			
		E			
		F			
		F♯			
		G			
		A♭			
		A			
		B♭			
		B			
		C			
		D♭			
		D			
		E♭			
		E			
		F			

Nos. 1, 2, 4, 5, 6 are the arrangements of frets in different thâts fc eighteen-fretted sitar. No. 3 is for a twenty-four-fretted sitar, in which the no need to alter the frets.

The intervals given represent those upon the F string or chanterelle.

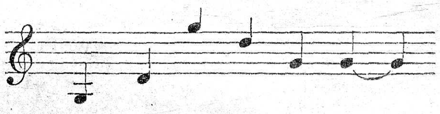
In Taraffedar sitars the sympathetic strings are tuned to the intervals obtained by the F string, and the frets over their respective nuts. All instruments with moveable frets (other than sitars) are arranged according to one of the above thâts. The sympathetic strings are arranged in various ways, but very commonly thus—G, A, B, C, d, e, f, g, a, b, some of th intervals being flattened or sharpened according to the râga played.

Some sitars are so constructed that the body is almost flat, instead of pear shaped. This is accomplished by cutting the gourd body in a peculiar manner so that the calix shall be at the back of the instrument. To such sitar the name Kachwar is given. Some people give the name Kachapi-vina to them A rather uncommon instrument of this description is called the Surbehar, which is merely a large-sized sitar or kachapi-vina, played with a steel plectrum, and specially used for the performance of alâpas or râgas. The body is of wood with a flat back, and there are usually sympathetic strings attached. The tone is rich and mellow like that of the vina, but the large size of the instrument renders its use fatiguing, while the cost is very high. It is tuned, of course, a the ordinary sitar.

But besides the sitar just described, there is another form of the instrum to be met with in Southern India. This might be called the Karnâtik-sitar; it differs from the ordinary sitar in that it is confined in its intonation and is generally made with a much thinner and shorter neck. Its capability is, of course, much less. It is usually shaped somewhat like a tamburi, the body of the instrument being made either of gourd or of wood. The manner of stringing is peculiar. The first and second strings only pass over frets, which are about ½-inch wide, and raised from the finger-board; these strings are tuned in unison, and they are placed very much nearer together than the other strings. The third string is tuned in unison with the first, but does not pass over frets. The fourth string passes round a small ivory bead about half way up the finger-board, whence it passes obliquely under the strings to its tuning peg. The fifth string is placed in a similar way, the ivory peg being in this case a little nearer to the bridge. The sixth and seventh strings pass straight up the finger-board in the ordinary manner. With the exception of the seventh, which is of brass, the strings are of steel, and are secured either as those of the tamburi or vina.

The frets are of wood, with an upper edge of metal, only about ¼-inch width, and fixed to the finger-board; the strings cannot therefore be pulled so as to produce "rekhu" without their coming off the frets. The number of frets is usually fourteen, placed at the intervals of the diatonic major scale; occasionally there are two extra frets at semitonic intervals, placed between the third and fourth, and tenth and eleventh. Karnâtik sitars are sometimes found fretted throughout in semitonic intervals, the number of frets being the same as in a vina.

The instrument is tuned thus—



In the ordinary instruments the noise made by the accompaniment frequently drowns the air, the strings having a strong tendency to twang. But the tone of these Karnâtik sitars, when properly made, is soft and sweet, and, being confined in intonation, more nearly resembles that of the mandoline than any other Indian instrument.

The Sur-s'ringâra—shown upon the left of the plate—is somewhat like the rabôb in shape, but with a wooden belly, and played with an iron plectrum. There are, as a rule, two frets only, the finger-board below the frets being generally of metal, so that the fingers may slide easily over it. The length of the instrument is about 4 feet, and its tone is rich and mellow, somewhat like that of the pizzicato notes of the violoncello. It is tuned thus, and has usually seven sympathetic strings tuned to the intervals of the râga in which the performer is playing; the melody string is that upon the right, tuned to G:—

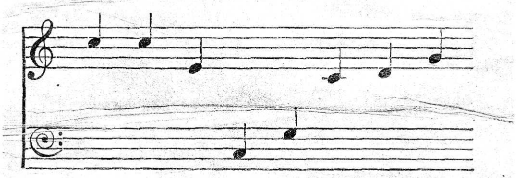


PLATE IV.

BÎN-SITAR. TAÜS

THE instrument to the left of this plate is the Bîn-sitar, in outward appearance very similar to the bîn previously described. It differs, however, in that the frets are moveable and are arranged precisely as given for those of the sitar. The strings are arranged as those of the bîn, and therefore reversed in order from those of the sitar. The Bîn-sitar is not a common instrument; indeed, the few specimens that I have met with have all been in Poona and the neighbourhood. The tuning is like that of the bîn.

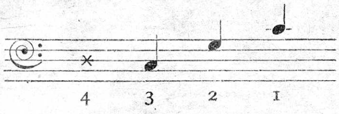
The instrument to the right of the plate is the Taüs or Esrar. Sometimes this instrument is called Mohur. It is merely a form of sitar with moveable frets. The Taüs is not much esteemed by any but Nautch musicians, and it is rarely to be met with out of Upper India. As its name implies, it is usually shaped like a peacock. Its body is painted like that of the bird, and to the lower end a wooden neck and head, covered with feathers, are attached. It is sometimes played with a bow.

The tuning varies slightly, but never employs other intervals than the tonic, fourth, and fifth; and occasionally the third. There are usually sympathetic strings attached, tuned to the intervals of the râga played.

PLATE V.

SÂRINDA. SÂRANGI.

THE Sârangi, or fiddle of India, shown to the right of this plate, is usually strung with three strings of thick gut and played with a bow. Sometimes a fourth string of wire called *luruj* is added. The fingers of the left hand, in stopping the strings, do not press them down upon the finger-board, but press against them at the side in all the positions. The tone of the sârangi more nearly resembles that of the viola than any European instrument, and when well played there is a charm about the instrument that is not easily forgotten. The sârangi is frequently employed to play a sort of *obbligato* to a song, particularly in theatrical performances and by Nautch companies. There are generally in instruments of this kind fifteen sympathetic strings of wire tuned chromatically. The instrument is made from a single block of wood hollowed out, and has a parchment belly. When in use it is held vertically, head uppermost. Curiously enough, as was the case with the violin in England at one time, the instrument is considered to be rather vulgar, and hence musicians, though they admire and like it much, will usually employ either a low caste Hindu or a Mussulman to play it. The tuning is as follows:—



The string marked x is of brass, tuned either to E or F, according to the requirements of the râga played—this string is called *luruj*.

The illustration shows the instrument as commonly found in the South of India and the Deccan. The resin for the bow is ingeniously placed in the head.

The bow for the Sârangi is the same as that shown in Plate IV. for the Taûs. In Upper India and the Punjâb a slightly different form of the Sârangi is found, and is generally more highly decorated and with a differently shaped head.

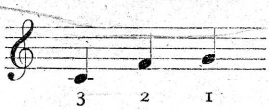
The three-stringed instrument to the left of the plate is the Sârínda, a bowed instrument common in Bengal. The decoration and carving are characteristic, although rough. The Sârínda is not a very high-class instrument, but is very popular with the lower classes. The tuning is like that of the chikâra, and the strings are of gut or silk. The bow used with it is that shown. The chief peculiarity of the Sârínda consists in the way that the belly, which is of parchment, is put on. As will be seen by the plate, it is made to cover only the lower part of the body, leaving the upper half quite open.

PLATE VI.

RABÔB. CHIKÂRA. SÂRANGI.

THE Sârangi found in Upper India differs slightly from that of the South and the Deccan. The head is generally carved to represent the neck of a swan, and the body is rounded instead of being square; the number of sympathetic strings, too, is often less. The beautiful specimen shown in the upper part of the plate is in the possession of Mr. C. Purdon Clark, C.S.I., through whose kindness Mr. Gibb has been enabled to make this representation. The instrument is ornamented with ivory and inlaid with numbers of small turquoises. The tuning and the method of playing the Northern Sârangi do not differ from that of the instrument described under the preceding plate.

The Chikâra—shown to the right of the plate—is somewhat similar to the sârangi, but smaller, and is used by common people. It has three strings of gut or horsehair and five sympathetic strings of wire. The tuning is

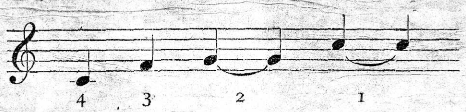


commonly, or else like that of the sârangi. The sympathetic strings are generally tuned to G, A, B, c, d; (any of these intervals being made ♭ or ♯ as required).

The other instrument in the plate is the Rabôb, which is found in almost all Mahomedan countries, and in various places differs only in shape. The Indian Rabôb is principally used in the Punjâb and Upper India; its use in other parts is confined to Mahomedans. The instrument is made of wood, with a belly of parchment. In general there are four strings—three of gut and one of brass; the two upper strings are sometimes doubled and tuned alike, in which case,

of course, the instrument has six strings. Sympathetic strings of metal ar usually attached at the side. Four or five catgut frets at semitonic intervals a sometimes found. The instrument is played with a wooden plectrum, and ra with a bow as a sârangi. The Rabôb is a handsome instrument, and when played is very pleasing. Its tone rather resembles that of the banjo.

It is tuned thus—



The specimen here shown is from Afghanistan. As usually found in India the Rabôb is slightly different, and is made with a rather larger body, the lowei part of which is wider in proportion than that of the illustration; but in the Punjâb a preference appears to be given for the Afghan form of the instrument.

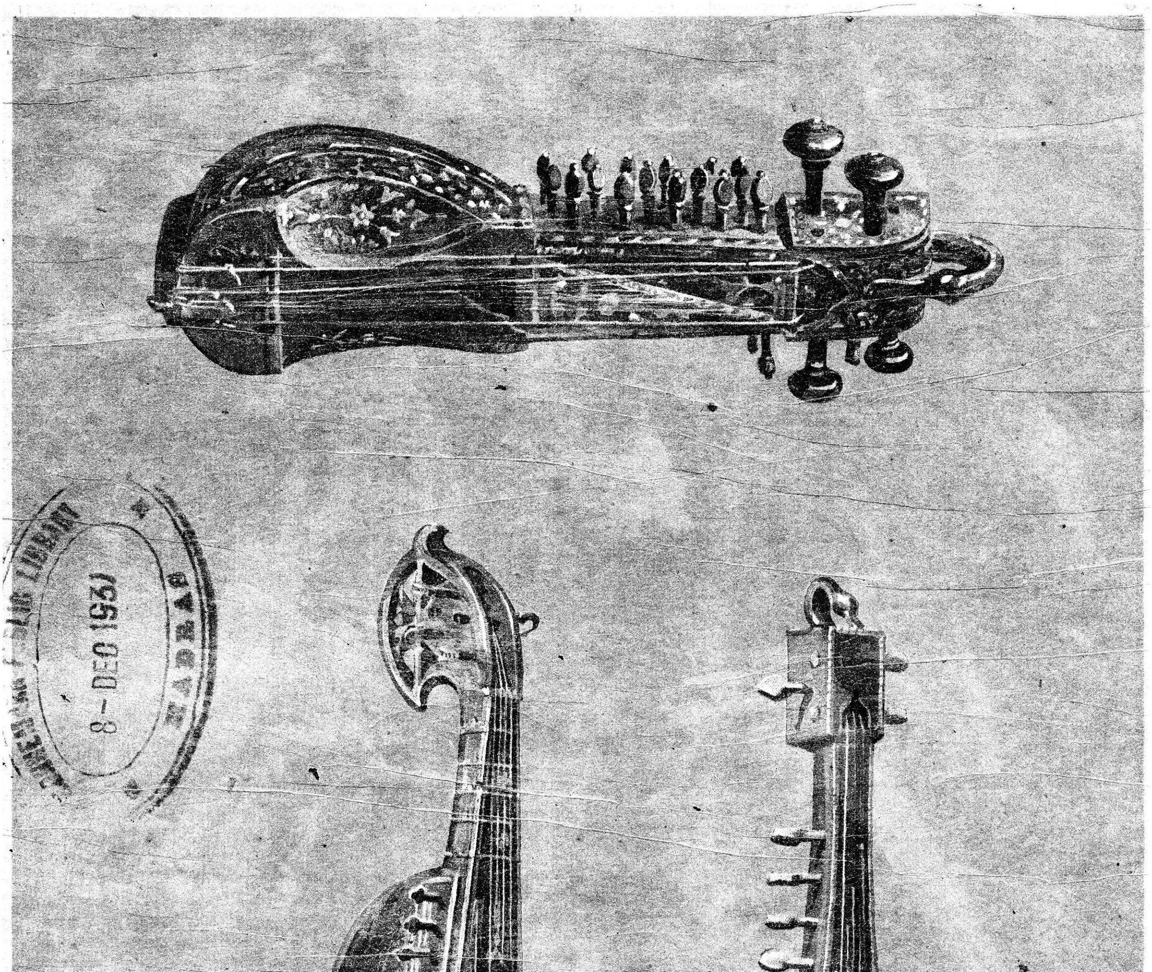
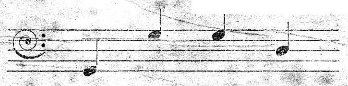


PLATE VII.

TAMBURI. YEKTAR. PERSIAN SITARA.

THE Tamburi shown to the left of the plate is used as a common accompaniment to singing, the strings are never stopped, but are always struck open by the fingers, which in this case are not armed with plectra. In outer form the Tamburi much resembles the vina, but is less omplicated, having no frets or calabash affixed to the stem ; and it is employed r accompaniments only.

There are four strings tuned thus—



4 3 2 1

The first, second, and third are of steel, the fourth of brass ; the steel ings are similar to those of the vina. The Tamburi has no side strings ; the ing pegs are placed differently to those of the vina ; those of the first and ond strings being placed at the side, as in a violoncello ; and those of the ond and third strings being placed at right angles to the centre of the head in a banjo or peghead guitar.

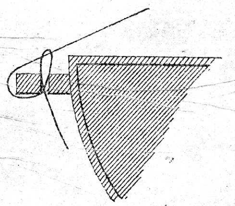
The bridge is moveable, and is entirely of wood or ivory, no metal being nployed in its fitting. The tone of a Tamburi is slightly buzzing, and to ocure this result pieces of quill or silk, termed *jivala*, are placed between e bridge and strings, and manipulated until the desired effect is obtained.

The nut is deeper than in the vina, the strings passing through holes stead of slits. In many tamburis there is a contrivance called *tekkah*, resembling

in action the capo-tasto of a guitar, sliding on the finger-board, and by means it the pitch of the instrument can be immediately altered to any degree require by the performer.

The strings are secured directly to the attachment, which is a narrow led fixed to the body, instead of to langarus as sometimes is the case in the vin In place of langarus, and for the purpose of assisting in tuning, there are bea called *pusalu*, threaded upon the strings between the bridge and the attac ment to which they are secured. These beads pushed down in the direction the attachment act like a wedge between the belly and the strings, and th stretching the strings serve to alter their pitch as required. This contrivance found in many Indian instruments.

The method of fastening the strings to the attachment is worthy of note, is as follows. The string is bent round the attachment and passed upw through one of the holes; it is then bent round itself and passed back throu the same hole when it is drawn tight, and the spare portion, if necessary, cut of



The belly of the instrument is usually slightly convex, and there are small circl of sound holes cut like those of the vina. When played the Tamburi is always h upright, the body resting upon the ground. The tamburis of the Southern pa of India are generally made with wooden bodies, beautifully carved a ornamented with ivory, as in the illustration; farther North they are found w bodies of gourd. Some of the finest instruments of this kind are made at Tan where their manufacture has been made a subject of special study, and l prices are frequently paid for them.

All instruments of this kind are called Tamburis, and many varieties be found; one kind frequently met with is made smaller and with a curved like that of the vina, and is used by mendicant singers.

Those of the kind described are used only by musicians and are styl "Dasiri Tamburi."

The Yektar, or Tuntuni as it is sometimes called, shown in the centre of tl plate, can hardly be called an instrument at all, since it has only one stri and no frets.

It is made from a piece of bamboo, to the under side of which a large gourd or hollow cylinder of wood is attached, one end being closed by a piece of parchment. In the centre of the parchment there is a hole, through which the string is passed and tied in a knot to prevent its slipping back.

The Yektar is often used by mendicants, and is twanged from time to time as an accompaniment to their monotonous chanting. In villages and country districts in the Deccan and Central Provinces this instrument is very popular. It is used in conjunction with a drum of some kind, and the performers keep up a sort of monotonous dialogue upon some common topic of village interest, which is full of witty and rather broad remarks about the principal personages present.

The three-stringed instrument to the right of the plate is the Persian Sitâra. Its use in India is very uncommon, but it is sometimes met with in large native cities, such as Hyderabad or Jeypur, where it is admired chiefly as a variety. The body of the specimen drawn is of wood, ornamented with ivory, the back of the instrument being left open. As can be seen, the belly is of parchment, and the tailpin, which serves as a foot for the instrument, is of brass, rather curiously worked. There are usually three gut strings, tuned like those of the sârangi, and played by means of a bow.

PLATE VIII.

SVARAMÁNDALA

THE Quanūn, or Indian Dulcimer, is an instrument seldom met with, and is to be seen mostly in the hands of Punjâbi musicians. There are usually twenty-one strings, some of brass and the rest of steel, and tuned to the intervals of any of the Indian scales as required by the râga played. Occasionally gut or silk strings are found. The kind of quanūn here drawn is called Svaramándala, and is generally larger and better finished than the ordinary instrument of this name. It is played with two wire plectra, worn upon the finger-tips of the performer. The capability of the instrument is much greater than might be supposed at first sight. The performer holds in his left hand an iron ring somewhat like a quoit, which he applies to the strings, so that it acts like a *nut* and thus enables him to produce all sorts of grace and embellishments. There is, of course, only one string to a note. The tone is sweet, soft, and reminds one rather of that of the clavichord, though it is louder and possibly more nasal in quality. The Svaramándala is rarely heard, both on account of its great difficulty and very high cost, and therefore good execution upon it is rarely met with.

The Santir, already mentioned as a Persian instrument, is also to be found occasionally. It, like the quanūn, is a kind of dulcimer, but has a great many more strings than the former, and is generally played by being struck with two sticks covered with leather or felt. Both these instruments are to be found in Afghanistan, Turkey, Persia, and Egypt, as well as Arabia. The Indian Quanūn and Santir do not differ much from the Egyptian and Arabian forms, drawings of

which can be found both in Lane's "Modern Egyptians" and Mr. Carl Engel's "Musical Instruments." The Svaramándala here drawn is from Cashmere. The tuning pins are turned by means of an iron key, and the tension of the strings is usually very high. The beautiful decoration and the delicacy of the painting with which this instrument is so profusely adorned are evident.

The Hindus say that an instrument of this description was first invented by the rishi or sage Kattyayana; hence it is called the Kattyayana vina—and sometimes Shatatantri (or hundred-stringed) vina—in the Sanskrit treatises.

PLATE IX.

KINNARI.

THE Kinnari is a rude stringed instrument employed chiefly by the country people in South Kanara and Mysore. It is somewhat singular that a stringed instrument of much the same name—the Kinnor[15]—should have been mentioned in the Bible, and this leads one to conjecture that they may both have been derived from the same Aryan source; for the Kinnari is an instrument of great antiquity, and takes its name from the legend that it was invented by Kinneri, one of the gandhârvas or singers of Brahma-loka, the heaven of the god Brahma.

It is formed out of a piece of bamboo or blackwood, about 2 feet 6 inches in length, upon which are placed frets, sometimes made from the scales of the pangolin or scaly ant-eater (bone or metal however is generally used), and fixed by means of some resinous composition. Beneath this stem are fixed three gourd resonators.

The instrument possesses two strings only, made of wire. One of these strings passes over the frets, the other is fixed rather above the frets, and is tuned either a fourth or fifth below the former, according as the instrument is tuned in Panchāma or Madhyama s'ruti.

The frets are twelve in number, and are placed according to the intervals of some particular scale or scales. Hence the compass and capability of the Kinnari are naturally limited. The tone is weak and thin, and the twanging of the strings renders the instrument unpleasant to ears not accustomed to it.

Most of the Sanskrit treatises upon musical instruments contain some mention of the Kinnari, or kinnari-vina as it is sometimes called. It is worthy of note that the tailpiece of the instrument is still invariably carved to represent the breast of a kite, precisely as directed in all the old treatises; and in many of the old sculptures to be seen on temples and shrines in the Mysore country this instrument is so represented.

---

[15] *See* II. Chronicles xx. 28.